National Aeronautics and Space Administration
**Explore. Discover. Understand.**

# NASAeducation

## RETURN TO FLIGHT:

# Engaging and Educating

There is excitement in the air as NASA prepares to safely return the Space Shuttle Discovery to flight. NASA's Office of Education is using that excitement to develop innovative activities and events that will engage and educate the public as well as inspire the next generation of explorers.

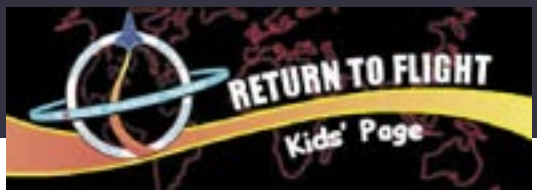
**Engaging Students —** NASA will host 30 students from five NASA Explorer Schools at the launch of STS-114, scheduled for July. The launch will be only part of their educational experience at NASA's Kennedy Space Center. Students will sleep onsite, under the giant Saturn V rocket, and will participate in a variety of activities connected to the launch and NASA.

**Interacting with Families —** Central Operation of Resources for Educators (CORE) has developed a family activity kit, family module, and a bulletin board set featuring Return to Flight (***www.nasa.gov/education/core***). The module and bulletin board will be distributed to the NASA Educator Resource Center Network and the NASA Explorer Schools. A Return to Flight (RTF) kids page, which includes kid-friendly RTF information and Space Shuttle-related activities, has been developed and is posted on the NASA Home Page at ***www.nasa.gov/audience/forkids/home/returntoflight.html***

**Attracting the Community —** NASA Centers around the country will host national activities and events such as Community Days, Open Houses, AstroCamp Saturdays, and Student Launch activities. Stennis Space Center has developed a Return to Flight exhibit, which is traveling throughout the Gulf Coast area. The exhibit includes a large scale Space Shuttle and panels explaining the mission and crew highlights, as well as activities for children.

**Including our Informal Education Partners —** Over 500 accredited museums and science centers have been invited to participate in day-of-launch events. In addition, 200 DVDs, with closed captioning, featuring the STS-114 crew are available. Museum/science centers, community-based organizations, and other informal groups may contact Reberta Jutkowski (281-483-3001) at NASA Johnson Space Center in order to receive a copy, on a first-come, first-served basis. DVDs are continuous loop and feature a short chapter on each of the crew members.

**Reaching the Public**
Educational videos highlighting "Return to Flight" are scheduled for broadcast on the NASA TV Education file during the week of July 25–31, 2005. Six 30-second NASA's Kids Science News Network™ news breaks, targeted at grades 3–5, were designed and produced to interest youth in learning more about Discovery's flight and the underlying scientific principles necessary to launch space shuttles. The news breaks were distributed to cinemas, museums, and other informal audiences. For more information on NASA's Return to Flight, visit the NASA Home Page at ***www.nasa.gov***




**A Return to Flight (RTF) Kids' Page** that includes kid-friendly RTF preparation information and Space Shuttle-related activities was deployed June 10. This page, targeted to children under 10, includes features about the Space Shuttle, the return to flight, games, multimedia, and other activities. The site is accessible from the NASA for Kids home page. There are four sections to Return to Flight Kids' Pages. COUNTDOWN (fact-filled, colorful storybooks about the Space Shuttle and Return to Flight), RETURN TO FLIGHT GAMES (interactive games provide stealth learning), MOVIES AND MORE, and YOUR MISSION (activities for kids to do). ***http://www.nasa.gov/audience/forkids/home/returntoflight.html***

**A Student Experiment Module (SEM)** that was delivered to the International Space Station by a Progress mission in December 2004 will return aboard Discovery. Schools and museum groups from across the country contributed experiments to this "SEM Satchel." Students create their own experiments and consider such variables as space radiation, microgravity, and launch environment. Student experiment teams had several opportunities to interact with their experiments and the ISS crew. After the return of the experiment, students will work to complete their investigations.

**Teachers Connect to Return to Flight**
Thirty members of the NASA Educator Astronaut Teacher (NEAT) Program have been invited to Kennedy Space Center for the launch. This cohort contains the finalists for selection as educator astronauts. These individuals have now returned to their classrooms and continue to promote NASA through public events and educational programming.

A Return to Flight for Educators area was created in the "For Educators" section of the NASA Web Site. Teachers may now visit one page for links to articles, classroom activities, multimedia and other resources to teach about Discovery's mission. ***http://www.nasa.gov/audience/foreducators/k-4/features/Educators_RTF_index.html***

**Museums and Traveling Exhibits**
Stennis Space Center has developed a Return to Flight exhibit which is traveling throughout the local Gulf Coast area. The exhibit includes a large-scale Space Shuttle and panels explaining the mission and highlighting the STS-114 crew. In addition, children that visit the exhibit can build and launch a "balloon rocket" to illustrate the principles of propulsion.

As part of the Explorer Institute's program, Kennedy Space Center hosted a workshop for informal educators about Return to Flight. Each attending group submitted an action plan for follow-up activities. In one example, the Denver Museum of Nature and Science has developed, implemented, and shared RTF educational programming for museums.